

ISPCS 2011 – Agenda

THEME: Business at the Speed of Innovation

Tuesday, October 18, 2011

- 11:00-2:00 PM **ISPCS Growing Community Partnership Luncheon, registration required**
Sponsored by Steinborn TCN Commercial Real Estate
- 5:30-7:00 PM **Speaker and Sponsor Reception, invitation only**
Sponsored by New Mexico State University
- 7:00-9:00 PM **Opening Reception- Hotel Encanto de Las Cruces**
Sponsored by American Institute of Aeronautics and Astronautics (AIAA)

Wednesday, October 19, 2011

- 7:30-8:30 AM **Full Breakfast Buffet**
Sponsored by CSSI, Inc.
- 8:30-9:00 AM **Welcome**
Pat Hynes, ISPCS Chair
Program Moderator, Janet Karika, Jacobs Technology, Inc.
- 9:00-9:45 AM **Keynote Address- U.S. Competitiveness: Where do we stand, and what can we do?**
Sponsored by Space News

When it comes to Commercial Space Transportation, how does the U.S. stack up in the global marketplace? Are there any specific actions we can take to improve our standing? What role can innovation play?

George Nield, Associate Administrator for Commercial Space Transportation
FAA

- 9:45-10:15 AM **Networking Break**
Sponsored by Fish & Richardson
- 10:15-11:00 AM **A strategic view on the state of the space industry; the time for a sustained vision and passion for the United States space program is now**
Sponsored by The Boeing Company

Great things can be done in space in our lifetime. A sustainable national vision is needed to create a space program worthy of our nation. Who and what will our nation rely on to create and execute this vision?

- 11:00-12:00 PM **Robert Bigelow, Owner and Founder, Bigelow Aerospace**
Business at the speed of innovation: (strategy x execution) x trust = results
Sponsored by New Mexico Space Grant Consortium

The ability to establish, grow, extend, and restore trust is a leadership

competence. Trust is a hard-edged economic driver and an operating system for success. As we develop the industry supply chain and create collaborations, relationship trust will be an accelerator as well as a growth strategy. LeRoy Maughan, senior consultant practitioner with Stephen M.R. Covey's Global Speed of Trust Practice, will engage the audience to discover how, when trust is in short supply, the speed of innovation decreases and business costs increase.

LeRoy Maughan, Senior Consultant, Franklin Covey Global Speed of Trust Practice

12:00-1:30 PM

Lunch

Sponsored by New Mexico Spaceport Authority

1:30-2:30 PM

Selling shovels to miners: Building the commercial space supply chain
Sponsored by United Launch Alliance

While miners were searching for gold, the people who sold shovels to miners got rich. A robust commercial space supply chain will provide stability, share risk for product development, create platforms for collaboration and enable long-term sustainability. This session will examine the benefits of supporting supply chain development. An organized supply chain will enable the formation of powerful and profitable alliances to develop and manufacture the products necessary for industry success.

Chair: Arash Azadegan, College of Business, New Mexico State University

Speakers:

- Tim Pickens, Chief Propulsion Engineer, Dynetics
- Mark Sirangelo, Corporate Vice President, Sierra Nevada Corporation's Space Systems

2:30-3:00 PM

Round table discussion: platforms for collaboration and innovation. The path forward for commercial spaceflight.
Sponsored by Sierra Nevada Corporation

Chair: Jeff Carr, Vice President, Aerospace Communications Griffin Communications Group

Speakers:

- LeRoy Maughan, Senior, Consultant, Franklin Covey's Global Speed of Trust Practice
- Robert Bigelow, Owner and Founder, Bigelow Aerospace
- Tim Pickens, Chief Propulsion Engineer, Dynetics
- Mark Sirangelo, Corporate Vice President, Sierra Nevada Corporation's Space Systems
- George Nield, Associate Administrator for Commercial Space Transportation, FAA

3:00-3:30 PM

Networking Break

3:30-4:30 PM

Sponsored by Georgia Department of Economic Development
Intellectual property: creating business assets and getting them to market
Sponsored by Bigelow Aerospace, LLC

Successful companies align their intellectual property (IP) plan with their business plan. IP is not just about innovation, it is also about commercialization. This panel will take a close look at how companies create meaningful IP portfolio's that are assets for their company. Speakers will discuss what you should do to protect yourself, your company, and your intellectual property when markets are in upheaval, customers are inconsistent, and intellectual property law is in flux. It will also address how you should protect your IP when working on state-funded developments.

Chair: James Babineau, Managing Principal of Fish & Richardson P.C., Austin, TX

Speakers:

- Jack Atzmon, CEO, SmartFish Technologies
- Randy Baker, Director of Finance, XCOR
- Mindy Bickel, Supervisory Patent Examiner, United States Patent and Trademark Office

4:30-5:30 PM

Re-entry from space: the experience of gliding back home
Sponsored by Virgin Galactic

Gliding has long been a fundamental part of aviation. The Shuttles were the most technically advanced gliders ever designed and flown by the U.S. Gliding back from space will continue to be part of the spaceflight experience. Session chair Brian Duffy piloted Atlantis on STS 45 and Endeavour on STS 57. He will provide the audience a rare perspective on this singular experience, gliding back to earth. Joined by fellow Shuttle pilot Steve Lisdsey, who piloted Columbia on STA 87, the mission that returned John Glenn to space. He was also pilot on Discovery, STS 95. Steve will discuss the flight profile of Sierra Nevada's Dream Chaser, a reusable spaceplan. Dream Chaser is part of NASA's Commercial Crew Development (CCDev) program. Non-powered flight is the means by which some spaceplanes will re-enter the atmosphere. Scott Osterm, with the SpaceShip Company, designers and builders of Virgin Galactic's WhiteKnight2 and SpaceShip2 Vehicles, will contrast the planned glide back under the unique feather system for spaceflight participants. This session examines two different re-entry profiles for orbital return, and two planned sub-orbital perspectives. Bob Carlton, who operates gliders in New Mexico, including a jet glider, will invite the audience to experience gliding just for fun. By riding columns of rising air called thermals, gliders ascend to altitudes of up to 18,000 feet above sea level. The view from the cockpit is spectacular and one can often see for miles in the clear blue skies of the Land of Enchantment.

Chair: Brian Duffy, Vice President and JSC Program Manager
Space Launch Systems, ATK Aerospace Systems Group

Speakers:

- Scott Ostrem, Chief Engineer at The Spaceship Company
- Steve Lindsey, Director, Flight Operations, Sierra Nevada Space Systems
- Bob Carlton, Vice President/Test Pilot/Aircraft Design, Desert Aerospace, LLC

5:30-7:00 PM **Reception - Hotel Encanto de Las Cruces**
Sponsored by ATK Aerospace Systems

7:00-8:30 PM **Dinner - Hotel Encanto de Las Cruces**
Sponsored by Dynetics and Rocket City Space Pioneers

8:30-10:30 PM **Reception - Hotel Encanto de Las Cruces**
Sponsored by City of Las Cruces

Thursday, October 20, 2011

7:30-8:25 AM **Full Breakfast Buffet**
Sponsored by SpaceX

8:25-8:30 AM **Welcome**
Pat Hynes, ISPCS Chair
Program Moderator: Debra Facktor Lepore, Stevens Institute of
Technology/DFL Space LLC

8:30-9:30 AM **Keynote Address - Ways NASA is supporting innovation in commercial
space, what is the national growth potential resulting from NASA's
support for this new industry?**
Sponsored by Arianespace

9:30-10:00 AM Lori Garver, Deputy Administrator, NASA
Networking Break
Sponsored by Milagro Coffee

10:00-11:00 AM **Business is growing at commercial spaceports. Both federal ranges and
spaceports do research, development and testing. Will spaceports be able
to grow individually and as a network in these early years – is there a
sweet spot for our nation in commercial space transportation?**
Sponsored by Jacobs Technology

The long-term vision for a full menu of interoperable commercial spaceport services will require planning for sustainability. While interoperability may be a long term target for the industry, short term sustainability plans are more pressing. Each of the panelists will discuss their #1 challenge, no two will be alike. Each panelist has a challenge at their spaceport, whether federal, state, that keeps them up at night. This panel will explore how spaceports are developing strategies during the transition to flight. Discussion will cover how they collaborate, compete, similarities and differences, and whether they work on topics of common purpose and mutual interest. The session will end with a lightening round of questions posed by the Session Chair.

Chair: Stuart Witt, Chief Executive Officer, Mojave Air and Space Port

Speakers:

- Jim Ball, Deputy Manager, Kennedy Space Center
- Thomas Berard, Executive Director, Air Force Flight Test Center, Edwards Air Force Base
- Mark Bontrager, Vice President, Spaceport Operations, Space Florida
- Christine Anderson, Executive Director, New Mexico Spaceport Authority
- Karin Nilsson, Chief Executive Officer and President, Spaceport Sweden

11:00-12:00 PM **With NASA being the anchor tenant, is it possible to achieve low cost to orbit?**
Sponsored by Bigelow Aerospace, LLC

As vehicle developers funded by NASA under the COTS program move forward, how much control is NASA going to levy on their enterprises and how much will they allow companies to be innovative? NASA has a unique foundational knowledge in accommodation of the human in space. The panelists will address the issues related to balancing concentration on the important with the negative impacts of over specifying? As the commercial spaceflight industry develops, keeping costs low will assure the emergence of a commercial market for the vehicle services.

Chair: N. Wayne Hale, Director of Human Spaceflight, Special Aerospace Services, LLC

Speakers:

- Kurt Clowers, Manager, Biomechanical Engineering Services in the Commercial Sector, MEI Technologies, Inc. (MEIT)
- Steve Lindsey, Director, Flight Operations, Sierra Nevada Space Systems
- Phil McAlister, Director, Commercial Spaceflight Development, NASA Headquarters
- Ken Bowersox, Vice President, Astronaut Safety, SpaceX
- John Mulholland, Vice President and Program Manager Commercial Crew Programs Space Exploration, The Boeing Company

12:00-1:30 PM **Lunch**

Sponsored by NASA

1:30-2:30 PM **International collaboration in space transportation: A case study on tackling the technical, cultural and political obstacles to develop a man-rated launch system**

Sponsored by Space Foundation Headquarters

Recent research by Robert Porter Lynch indicates in their Engines of Innovation study, breakthroughs in technology in the next century will be within already existing industries and fields of thought. ATK, Astrium, Snecma and Arianespace created an international team to build a 300-foot-tall

man-rated rocket called Liberty. The idea is to combine elements of flight-proven systems, shorten the development cycle, use teams with capabilities that when combined create a heavy lift launch vehicle, meet market demand and collaborate with the intention of innovating human and technical systems. The panel will use a case study format to discuss cross cultural collaboration that created a new transportation system and a business plan through the partnership.

Chair: Lon Levin, President, SkySevenVentures

Speakers:

- Clay Mowry, President, Arianespace, Inc.
- Charlie Precourt, Vice President & General Manager Space Launch Systems, ATK
- Silvo Sandrone, Vice President, Business and New Programs Development, Astrium Space Transportation
- André Beaurain, Liquid Propulsion Business Development Officer, Snecma
- Vincent Sabathier, President, Sabathier Consulting

2:30-3:30 PM

Advancing space collaborations between commercial space, federal government, state government and national labs
Sponsored by Air Force Research Lab

At ISPCS-2009 Gary Payton, Deputy Under Secretary of the Air Force Space Systems announced the Air Force would partner with commercial space to launch Air Force satellites. In June 2011 the Operationally Responsive Space Office (ORS) launched a new battlefield reconnaissance satellite from the Mid Atlantic Regional Spaceport (MARS) on a Minotaur built by Orbital Sciences Corporation. This panel will showcase some of the commercial space transportation industry partnerships that test and launch military satellites.

Chair: Peter Wegner, Director, Operationally Responsive Space Office

Speakers:

- Casey Deraad, Chief Technology and Education Outreach, Air Force Research Lab
- Mark Pieczynski, Vice President, Orbital Sciences Corporation, Southern California Engineering Center
- Billie Reed, Executive Director, Virginia Commercial Space Flight Authority (VCSFA) and the Mid-Atlantic Regional Spaceport (MARS)

3:30-4:00 PM

Networking Break
Sponsored by Wyle

4:00-5:00 PM

How the entrepreneur can benefit from the regulatory environment
Sponsored by El Paso Electric

Are the rules that government makes you follow advancing your business or holding you back? Are they helping to promote fair competition by creating

a level playing field? Are they letting you allocate risks and manage liabilities adequately? Do they allow you to work effectively with international partners? Learn directly from U.S. regulatory and policy experts what the U.S. Government is doing to help create a regulatory environment that supports and encourages the personal and commercial spaceflight industry. And take this opportunity to discuss which rules you think are working and which are not.

Chair: Franceska Schroeder, Principal, Fish and Richardson P.C., Washington, DC

Speakers:

- Laura Montgomery, Senior Attorney, Commercial Space Transportation Office of the Chief Counsel Federal Aviation Administration
- Courtney Graham, Associate General Counsel, Commercial and Intellectual Property Law, NASA Office of the General Counsel

5:00-5:15 PM

Closing

Friday, October 21, 2011

9:00 AM-3:00 PM

Tour Spaceport America- Departing Hotel Encanto de Las Cruces registration required